

# Mississippi Beef Cattle Improvement Association

Mississippi Beef Cattle Improvement Association—Productivity and Quality



### Upcoming events:

- June 28-July 1—Beef Improvement Federation annual meeting, Columbia, MO
- June 30—Mississippi Homeplace Producers Feeder Calf Board Sale nomination deadline
- August 2—Mississippi Homeplace Producers Feeder Calf Board Sale, Hattiesburg, MS
- August 12-13—Deep South Stocker Conference, Moultrie, GA
- September 1—Mississippi BCIA Fall Bull Sale nomination deadline
- November 4-6—MSU Artificial Insemination School, Mississippi State, MS
- November 11—Mississippi BCIA Fall Bull Sale, Raymond, MS, 12:00 noon

### Inside this issue:

- Sire Profit Comparison 2
- MBCIA Membership Application 4
- Feeder Calf Grades 4

## Mississippi Beef Cattle Seedstock Directories

Listings of Mississippi beef cattle breeders are available online through two directories. These lists are provided to assist beef cattle producers in locating beef cattle seedstock in Mississippi.

The Mississippi Beef Cattle Improvement Association (MBCIA) maintains a seedstock directory at [msucare.com/livestock/beef/mbcia/seedstock.html](http://msucare.com/livestock/beef/mbcia/seedstock.html). In this directory, beef cattle seedstock suppliers are listed by breeds. It is comprised of information compiled by the MBCIA, Mississippi State University Extension Service, and state beef cattle breed associations.

Additional Mississippi beef cattle seedstock source information is welcomed. To submit a new seedstock listing to the MBCIA directory or to update a current listing:

- 1) Complete a Mississippi Seedstock Directory Listing Submission Form available on the directory website,
- 2) E-mail listing information to [jparish@ads.msstate.edu](mailto:jparish@ads.msstate.edu), or
- 3) Fax listing information to 662-325-8873

The Mississippi Cattlemen's Association also publishes a beef cattle breeders directory on the Internet. Go to

### MBCIA Beef Cattle Seedstock Directory



#### Beef Cattle Seedstock Sources in Mississippi

Beef cattle seedstock suppliers are listed by breeds. This list is provided to assist beef cattle producers in locating beef cattle seedstock in Mississippi. It is comprised of information compiled by the Mississippi Beef Cattle Improvement Association, Mississippi State University Extension Service, and state beef cattle breed associations.

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**Angus** (submit listings through the *Mississippi Angus Association*)

**Beefmaster**

**Brahman**

**Brangus**

**Charolais**

**Gelbvieh**

**Hereford**

**Limousin**


**Red Angus**

**Red Brangus**

**Santa Gertrudis**

**Simmental**

[www.ms cattlemen.org](http://www.ms cattlemen.org) and click on the Mississippi Breeders link under the Industry Directory Heading. Contact MCA at 601-354-8951 or e-mail [mscattle@telepak.net](mailto:mscattle@telepak.net) to learn how to be added to this directory.

  
**MISSISSIPPI CATTLEMEN'S ASSOCIATION**

Organizations	Publications	Membership	Industry Directory	News	Photos
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**Mississippi Breeders**

- [Angus](#)
- [Beefmaster](#)
- [Braford](#)
- [Brangus](#)
- [Charolais](#)
- [Gelbvieh](#)
- [Hereford](#)
- [Limousin](#)
- [Senepol](#)
- [Simmental/Simbrah](#)

## 2009 Observations of the Iowa Sire Profit Comparison Project



Feedlot and carcass data collection can be a valuable management and marketing tool for both cow-calf and stocker operators

*Editors Note:* Many Mississippi producers send cattle through the Tri-County Steer Carcass Futurity (TCSCF) program to obtain feedlot performance and carcass data on their cattle. The Mississippi Farm to Feedlot Program facilitates data collection and interpretation from a variety of feeders, such as the TCSCF feedlots, chosen by local producers. For more information on these programs, visit the Farm to Feedlot website at [msucares.com/livestock/beef/ftf](http://msucares.com/livestock/beef/ftf).

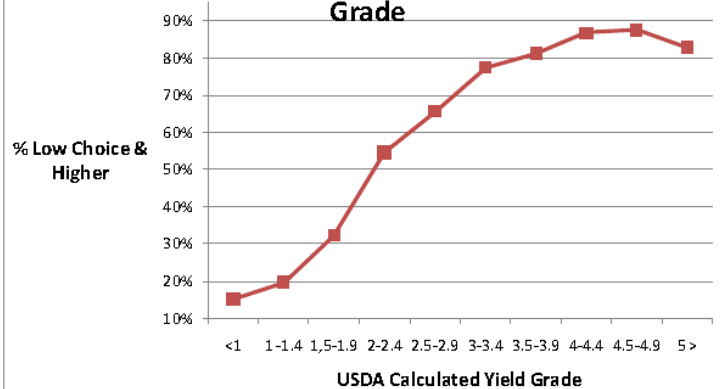
The popularity of the Tri-County Sire Profit Analysis is evidenced by the major increase in sires evaluated in 2009, a total of 1087 sires were included! As in the past, sires are included if they have 5 progeny or more that have complete data. 2009's analysis evaluated over 43,250 head of cattle.

In past observation reports a correlation table was given, but things of importance to profit have not changed. Growth, dressing percent, carcass quality (% Ch- and higher), acceptable muscling and health in the feedlot continue to be mainstay traits.

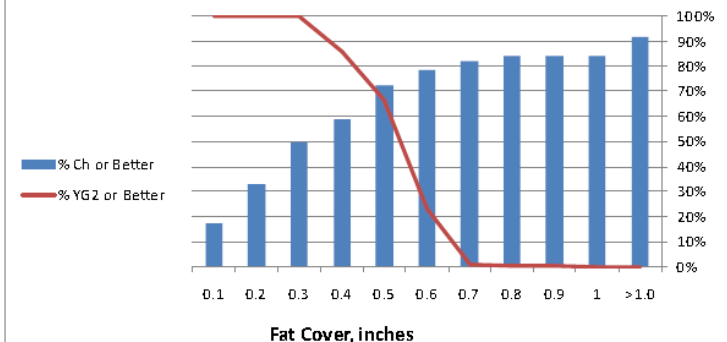
Many questions come into Tri-County concerning why things are done the way they are, for instance, the sort routine. The goal is to maximize Quality Grade (QG) without severe discounts due to Yield Grade (YG) problems and overweight carcasses. It's a fine line that the TC crew walks, but the success rate is exceptional. Notice in chart 1 that once cattle reach the YG3 mark 89% of the maximum QG distribution has been attained and this

keeps them away from YG discounts. The main driver in YG determination is fat cover, so look at chart 2. By the time cattle reach .45" to .5" fat cover they have reached 86% of their genetic potential to grade Ch- or better, again without pressing on YG discounts, but notice the percent YG 1&2s is plummeting. One more observation

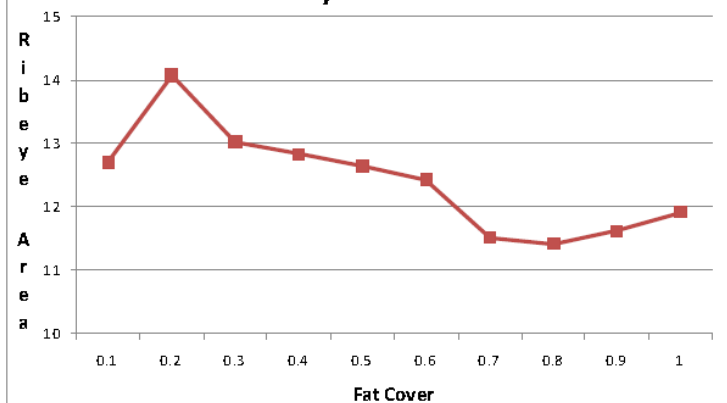
**Chart 1. % Low Choice or Higher vs. Yield Grade**



**Chart 2. Low Choice & Yield Grade 1&2s as Fat Cover Increases**



**Chart 3. Ribeye Area vs. Fat Cover**



*"...Growth, dressing percent, carcass quality, acceptable muscling, and health in the feedlot are key factors affecting feeding profit."*

## Sire Profit (Cont.)

<b>Comparison of Top Profit Bulls to Bottom Profit Bulls: 2004-2009</b>			
<b>Trait</b>	<b>Sire Groupings</b>		
	<b>Top 25%</b>	<b>Bottom 25%</b>	<b>All Sire Average</b>
Number of Sires ⇒	272	272	1087
<b>Feedlot Performance</b>			
Delivery Weight	676	640	657
SPA Calf Value	\$512	\$493	\$502
Ave. Disposition Score	1.73	1.79	1.77
Overall ADG	3.30	3.07	3.18
Adjusted Final Weight	1221	1163	1188
Feed to Gain	6.79	6.94	6.87
Feed Cost/cwt of Gain	\$50.95	\$52.02	\$51.53
<b>Health Performance</b>			
Individual Health Treatment Costs	\$3.74	\$9.94	\$6.46
<b>Carcass Performance</b>			
Hot Carcass Weight	754	710	730
Dressing Percent	61.8%	61.0%	61.4%
Fat Cover	0.45	0.45	0.45
Ribeye Area	12.8	12.3	12.5
Ribeye Area/cwt. Of Carcass Weight	1.69	1.73	1.71
Yield Grade (calculated)	2.83	2.84	2.85
% Low Choice or better	79.2%	50.5%	64.7%
% Upper Choice or better	21.3%	8.3%	13.9%
<b>Profitability</b>			
Average Lifetime Profitability	\$188	\$98	\$144

*“...Sire selection can dramatically influence feedlot, health, and carcass performance and ultimately profitability.”*

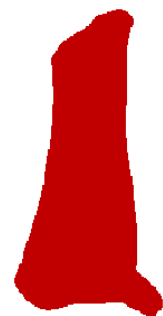
that the TC data shows is that fatter cattle have less muscle (see chart 3), another reason not to push for a fatter sort level.

So as one looks to improve his cattle, finding sires that walk this fine line may be a defined goal for your program. For instance, in the top 25% ranking Angus sires in the TC summary there are 48 bulls with progeny yielding below average fat cover (less than .45”) with over 80% Ch- and better for QG. Quite possibly there are a couple of sires in that group which might meet other selection parameters in your operation. It is important not only to study the data on your cattle, but one needs to look beyond and see what exists in other herds to maximize your chances of profitable improvements. As stated in the past, perfection in a sire is

nearly impossible, so improving your program is a matter of plugging weaknesses one hole at a time.

Source: Iowa Beef Center, Iowa State Univ.

*The main objective of the TCSCF program is to provide information to beef producers for use in managing and marketing their product. The program provides producers with information on feedlot performance, average daily gain, and carcass data on one or more steers/heifers entered. This information can be used by the producer to change breeding and management programs or may be used as a basis for change in a producer's marketing program. Producers may use data obtained from participation in TCSCF with high performing steers as a tool in selling their cattle.*



By the time cattle reach .45” to .5” fat cover they have reached 86% of their genetic potential to grade low Choice or better

Mississippi Beef Cattle Improvement Association—Productivity and Quality

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Send questions or comments to Jane Parish,  
Extension Beef Cattle Specialist,  
Mississippi State University Extension Service

*Jane Parish*

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Visit MBCIA online at  
<http://msucares.com/livestock/beef/mbcia/>

## MBCIA Membership Application

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

County: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

(Check one) Seedstock:  Commercial:

Cattle breed(s): \_\_\_\_\_

Completed applications and \$5 annual dues or \$100 life-time dues payable to Mississippi BCIA should be mailed to:

Mississippi Beef Cattle Improvement Association  
Jane Parish, Extension Beef Cattle Specialist  
Box 9815, Mississippi State, MS 39762

## Feeder Calf Grades

A basic way to establish value for feeder cattle is the USDA grading system for frame size and muscle thickness. Market classes and grades segregate cattle, carcasses, and products into uniform groups based on the preferences of buyers and sellers. They are also used to make contracts on the futures market and facilitate trading feeders without actually seeing the cattle. A basic understanding of how feeder calf grades are applied enables cattle producers to estimate relative calf crop value and make informed breeding and culling decisions.

Grades are based on three factors: 1) frame size, 2) muscling and 3) thriftiness. Feeder calf grades allow buyers and sellers to categorize feeder calves in two ways: 1) frame size and 2) muscle thickness.

Frame size is a measure of skeletal structure and depends on hip height and age. It indicates growth and is related to slaughter weights at which cattle should attain a given amount of fat thickness. Frame size impacts the calf's growth curve or the time it takes that calf to finish (reach maturity) in a conventional feeding system.

There are three frame scores in the USDA system: Large, medium and small. It is determined by evaluating the length and height of the calf. The "Large" grade is assigned to steers that will finish over 1250 pounds. "Medium"

framed steers typically finish between 1100 and 1250 pounds. "Small" framed steers usually finish at less than 1100 pounds. Heifers normally finish 100 pounds lighter than steers, and each frame score is adjusted accordingly.

No.1



No.2



No.3



No.4



The degree of muscling (muscle thickness) on a calf is related to muscle to bone ratio at a given degree of fatness. It is used as a rough indicator of Yield Grade at maturity. There are four muscle grades in the USDA system: #1, #2, #3, and #4. A "#1" muscle grade designates at least moderately heavy muscled calves that will be expected to have a more desirable (lower) Yield Grade when finished at a given degree of fatness. A "#2" muscle grade is assigned to calves

with an average amount of muscle and possibly showing some indication of dairy breeding. A "#3" muscle grade indicates thin, light-muscled calves. Finally, a "#4" muscle grade is assigned to calves that are extremely light muscled.

For a calf to be assigned any of the 12 combinations of frame and muscle grades, they must be "thrifty." A thrifty animal does not exhibit signs of mismanagement, disease, parasitism or lack of feed. If a calf is deemed unthrifty, it is assigned the "Inferior" grade but could qualify for frame and muscle grades at a later date if the problem is corrected. Double-muscled cattle are also graded as inferior.